

22C:16 Quiz 13

Implement a class called `change`. Each instance of the `change` class contains some number of pennies, some number of nickels, some number of dimes, and some number of quarters. Here is an example of how I would construct an instance of the `change` class:

```
x = change(3, 4, 5, 11)
```

This assignment creates an instance of the `change` class called `x` that contains 3 pennies, 4 nickels, 5 dimes, and 11 quarters.

The `change` class should provide the following methods:

- (a) A method called `addMoney` that takes a four non-negative integers that represent the number of coins of each type and adds this to the coins in the `change` instance. For example, I could call this method as:

```
x.addMoney(2, 1, 1, 2)
```

and after this call the `change` instance `x` would have 5 pennies, 5 nickels, 6 dimes, and 13 quarters.

- (b) A method called `getMoney` (with 0 arguments) that computes and returns the total amount of money in the `change` instance. For example, if the `change` instance `x` contains 5 pennies, 5 nickels, 6 dimes, and 13 quarters then the following call

```
x.getMoney()
```

would return 4.15.

Suggestion. My suggestion would be to use 4 `int` attributes to keep track of the number of coins of each type that the `change` instance contains.

What to write. You have to write down the implementation of the `change` class with one constructor method and two methods, namely `addMoney` and `getMoney`.